ROCBOND
Exterior Stucco

Standard Specifications *for* Construction *and* Application

The Rocbond Co.
VAN WERT, OHIO.
CEDAR RAPIDS, IA.
HARRISBURG, PA.

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Our Bond

Stucco materials should be judged by their *ability* to give the service which may rightfully be expected of an exterior wall covering.

By this standard, ROCBOND is unexcelled.

But if, by reason of improper application, a stucco is deprived of the opportunity of giving its potential service the responsibility must rest with factors beyond the manufacturer's control. We present herewith our specifications of conditions of application which will insure the complete success and unquestioned service of ROCBOND. Our experience and our integrity are the user's best guarantee.

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ROCBOND

Standard Specifications for Stucco Construction and Application

In preparing these specifications for Rocbond Stucco we have aimed to be specific and to cover only those items that have a direct bearing on the success of the stucco itself. We leave the general matters of design, planning, etc., to the architect, whose broad and general knowledge should be consulted and whose advice should be followed.

Standard stucco construction may cost a trifle more than the ordinary kind, but when the small amount extra may mean the difference between the success and failure of the work it is very wisely spent. Rocbond standard construction is economical, but it must not be confused with "cheap" constructions which are always the most expensive in the long run.

Every item in these specifications has its purpose, each is the result dictated by long experience, and all should be painstakingly followed.

I—Foundation

The footings and foundation shall be of ample size, square-toed, and designed to avoid uneven settling of the building which would

result in cracks in the stucco. Full attention shall be given to the foundation of the porches as well as of the body of the house.

II—Wood Framing and Sheathing

Substantial main sills shall be provided.

The standard practice of spacing the studding 16 inches on centers shall be followed. The studding shall run continuously from the main sill to the rafters.

Ample bracing (preferably consisting of 1x4 boards set diagonally and flush with the studding) shall be provided at the corners to insure rigid construction.

Porch banisters and columns which are to be stuccoed shall be rigidly constructed, and the banisters shall be supported properly to avoid sagging.

Sheathing shall be applied to all wood frame constructions. Felted cane fibre or flax fibre sheets may be used in place of wood sheathing if better insulation is desired.

The wood sheathing shall be of uniform thickness and securely nailed to the studding with an 8-d nail every 2 inches of the width of the board. The boards shall not be over 10 inches wide and shall be applied horizontal, not diagonal. The butt joints shall come over the studs.

III—Wood Lath

Wood lath shall be of first quality; shall be free from knots or the knotty portions shall be discarded; shall be free from pitch, gum, or rosin; shall be straight-grained and without tendency to split in nailing; and shall not be subject to warping. White pine, cypress, or redwood lath are preferred.

Wood lath shall always be applied over sheathing and furring, never directly on the studding. The furring strips shall be about 3/8 inch in thickness (pieces of wood lath of even thickness may be used for this purpose) and shall be placed over the sheathing above each stud and firmly nailed.

Wood lath shall be applied horizontal. Over old lap siding they shall be placed slightly diagonal, but never vertical or nearly so.

The wood lath pieces shall be spaced not less than 1/4 inch nor more than 3/8 inch apart.

End joints of the lath shall be broken from stud to stud at least every eighth lath.

Each wood lath piece shall be nailed through the furring over each stud with a 4-d nail. Galvanized or zinc coated nails shall be used exclusively. No common wire nails shall be used in exterior construction.

Byrkett sheathing-lath or sheathing with grooves cut in it shall not be substituted for wood lath and shall not be used in connection

with ROCBOND STUCCO. Other forms of patent or trade-marked stucco backings shall receive our specific approval before being used for Rocbond. Consult with us about them.

In lathing over an old frame building having ordinary lap siding, the lath shall be placed diagonally across the wall directly on the siding without furring strips, and shall be nailed at each and every contact. Old flat siding shall be furred and lathed the same as sheathing.

IV—Reinforcement of Joints

Wood lathed and all similar non-flexible constructions shall be reinforced at all corners and angles of the building, the reinforcing to extend 4 inches each way from the corner.

If the stucco is to extend below the main sill and partly onto the foundation in one piece, the junction shall be reinforced from a line six inches above the top of the foundation entirely to the baseboard at the bottom.

Where the stucco is to be continued from the body of the house onto the sides of the porch, the junction shall be reinforced with a strip eight inches wide.

The reinforcing material shall consist of either expanded metal lath or woven wire lath and shall meet our specifications for these materials (See section V).

OPTIONAL: Instead of reinforcing the corners, they may be fitted with corner boards (1x3) which are rabbeted on the edges to receive the stucco, or they may be fitted with pure zinc corner beading. Common galvanized corner beading shall not be used.

V—Metal Lath

Expanded metal lath shall be of the kind which is heavily galvanized after fabrication, or shall be made from pure zinc. No common painted iron or steel metal lath shall be used for exterior stucco.

Wire reinforcing fabrics and woven wire lath (heavy hardware cloth) shall be of the "galvanized-after-woven" kind. Flimsy chicken netting shall not be used.

The expanded metal lath may be placed flat on the sheathing without furring, but very thin furring is required under the wire lath and fabrics unless they are crimped.

All forms of metal or wire lath shall be applied over sheathing and not directly to the studding, except as follows:

OPTIONAL: Expanded metal lath or woven wire lath may be applied over 3/8 inch galvanized metal furring strips directly to the studding provided a back-plastered coat of stucco is applied to the inside surface of the lath between the studding.

Expanded metal lath and woven wire lath shall be attached to the sheathing by one-inch large-headed galvanized roofing nails at points every 6 inches each way, and shall be lapped 2 inches at the sides and ends of each piece. Joints at the corners and angles of the building shall be avoided.

VI—Masonry

(*Hollow Tile, Cement Block, Brick, etc.*)

All masonry which is to receive a coating of ROCBOND STUCCO shall be laid up with a Portland cement mortar (1 part cement: 3 parts sand) without lime. Lime mortar, lime-fattened mortar, Brixment Carney mortar, etc., shall not be used in contact with Rocbond Stucco.

If lime mortar has been used in any new masonry to be stuccoed immediately, the mortar joints shall be painted with an asphalt paint which has been thinned down with an equal volume of gasoline. Paint the joints only. The faces of the tile or block shall *not* be painted. (The mortar in masonry a year old or more is inert and safe, and need not be painted.)

Hollow building tile shall have scored or grooved outer faces and shall be neither glazed nor excessively absorbent.

White pressed brick made of sand and lime

shall not be used as a backing for ROCBOND STUCCO.

Clay brick shall be well burned but not glazed, and shall be laid with raked or inset joints.

All masonry shall be brushed clean with a wire brush before applying the stucco.

Smooth cement walls and old brick work which has been painted shall be chipped rough and brushed clean also.

All chimneys which are to be stuccoed shall be provided with an overhanging stone or cement cap and flashing, and shall be completely wrapped with metal lath, same to meet our specifications.

Cement block shall be rough or corrugated, or shall be chipped to form completely adequate bonding surfaces, and shall be of good strength.

VII—Water Table and Baseboard

A standard water table (or its equivalent in a brick, stone, or cement ledge) or a molding of wood, zinc, or copper, shall be provided at the main sill of the building.

OPTIONAL: The stucco may extend down partly over the foundation in one piece (see specifications for reinforcing) to a baseboard of 1½ x 8 inch cypress or redwood lumber beveled on the top edge, or to a footing of

brick, stone, or cement, which shall be not less than 8 inches high. The stucco shall *not* extend to the ground or grade line.

The stuccoed skirts of porches, bottoms of porch posts, and abutments of steps shall be provided with a baseboard as in preceding optional.

A 6 inch baseboard shall be placed on the wall at the floors of all porches.

All basement windows to which the stucco reaches shall be provided with adequate lintels.

VIII—Flashing

In addition to all the usual structural details which require it (such as porch roofs, chimneys, etc.), flashing shall be provided as follows: Under all belt courses; under a course of siding with stucco below it; under the water table if stucco is applied on foundation wall below it; under all window sills, door sills, column caps, and banister caps which do not have at least a two-inch overhang and a drip edge; under all brick window sills and brick ledges; and under the coping of a capped wall.

All flashing which is to come into contact with stucco shall be of zinc or lead.

IX—Placing of Trim and Details

All window and door trim, moldings, watertables, copings, sills, belt courses, gutters,

brackets, flashings, etc., shall be in place before the stucco is applied. The down-spouts may be hung temporarily 6 to 10 inches away from the wall to permit proper application of the stucco back of them.

Conduits and down-spouts shall not be embedded in the stucco.

All brackets, hooks, hinges and other metal fittings coming in contact with the stucco shall be of zinc or galvanized construction.

X—Special Features

Flower pots, water tanks and embankment or terrace retaining walls shall not be finished in stucco.

The application of stucco on window sills, flares, ledges, or any sloping surface or projection is inadvisable in northern climates, but under any circumstance such constructions shall be heavily reinforced with either zinc expanded metal lath or galvanized hardware cloth.

Copings, caps, or other top or horizontal surfaces shall never be made of stucco.

XI—Storage and Care of Materials

The Rocbond stucco material shall be stored inside a dry building—not on the ground and not in a basement. All possible care shall be taken to prevent its becoming damp from rain, snow, dew, or contact with the ground.

Stucco material that is damp, hard or lumpy, is unfit for use and should be discarded. (The magnesium chloride flakes may become lumpy and still be perfectly good, although loss from needless exposure should be avoided.)

In hot summer weather, the stucco material, magnesium chloride supply and solution, and the mixing box shall be kept in as cool a place as possible and out of the direct sunlight so as to avoid too rapid setting.

XII—Mixing Solution

The magnesium chloride flakes or crystals which accompany the stucco shall be dissolved in pure clean water in either wooden barrels or in galvanized tubs or vats. The solution strength shall be adjusted to exactly 22° Baume, as determined by test with an accurate and easily read hydrometer, and no weight-volume ratio of flakes or crystals and water shall be relied upon.

The hydrometer tests shall be made on a portion of the well-stirred liquid in a vessel deep enough to float the hydrometer freely.

All scum and foam shall be removed from the liquid before testing or using.

The same solution strength of 22° Baume shall be used throughout each entire installation and at all seasons of the year.

XIII—Priming Surfaces

All wood and masonry surfaces shall be

moistened or primed with a portion of the 22° Baume magnesium chloride solution. The priming shall be applied not more than one-half hour before the stucco is applied; it shall be applied to all portions and angles of the surface, and it shall be sufficient to reduce the absorption of the surface to a minimum.

Extremely absorbent surfaces should be avoided, but if such are encountered they may be primed first with water and the priming then completed with the full strength (22° Baume) solution.

The surface of the first or base coat of the stucco if cured out, shall also be primed before applying the finish coat, using some of the 22° Baume magnesium chloride solution.

Rain-soaked surfaces shall be allowed to dry out, and those which contain frost or are sleet-coated shall be allowed to thaw and dry, before receiving the priming and stucco application.

XIV—Preparation and Application of the Stucco

No extra substances of any kind whatever shall be mixed into the ROCBOND STUCCO composition. It shall be prepared for application only by tempering with the solution of magnesium chloride prepared in accordance with our specifications. Any hard lumps in

the stucco material shall be discarded and not used.

The mixing apparatus and hods or buckets shall be of wooden or galvanized construction and shall be maintained clean and free from all lime, plaster, mud, dirt, and foreign substances.

The stucco composition shall not be tempered with the solution until the application is ready to proceed and the application shall then be carried on without delay.

Tempered material which has stood so long as to have become partially set up shall be discarded and shall *not* be retempered for use.

Each batch of material shall be thoroughly and uniformly prepared and shall be as nearly as possible of the same consistency as other batches. Each batch shall be completely removed from the mixing box before the succeeding batch is started.

The base coat of the stucco shall be applied to a full ¼ inch thickness. If the backing surface is noticeably uneven, the depressions shall be filled in with some of the base coat material, allowed to set, and the entire surface then covered with the full 1/4 inch base coat. Cement mortar shall not be used as a filler.

The base coat shall be brought to a true even surface with a darby, and lightly scored or cross-hatched with a broom. It shall be al-

lowed to set up sufficiently firm to be not disturbed or "mushed," before proceeding with the application of the finish coat. "Green doubling" shall not be performed.

Over wood lath or metal lath surfaces it is recommended that the finish coat be applied as soon as possible after the base coat has become quite firm but before it is completely cured out. Over masonry surfaces, especially hollow building tile, the base coat shall be allowed to become completely cured out and be thoroughly primed before the finish coat is applied.

The finish coat shall be applied to a full even thickness of ¼ inch, working over it as little as possible and *not* using a darby.

Finish coat work on a full side of a building shall be continued without interruption or "leave-off" except at an angle or natural break in the wall.

No other work which involves pounding, jarring, or vibration shall be allowed in the building while the stucco is being applied or is setting.

XV—Application of Dash Coat

All dust shall be removed from the dash material by screening before application.

The pebble dash coat shall be applied *immediately* following the application of each section of the finish coat.

The dash material shall be thrown sufficiently forcibly against the surface to become firmly embedded. It shall be thrown as thickly as possible and with a slightly upward stroke. The dashed surface shall be lightly pressed or patted with a trowel, unless the rough natural texture is specifically desired.

Color mixtures of dash material shall be thoroughly and uniformly prepared and in sufficient amount for an entire side of the building at one time. Fresh mixtures shall not be started in the middle of a wall.

Reclaimed excess dash material falling to the ground shall be caught on clean canvas, and pieces of stucco and all foreign material shall be removed from it before it is used again.

All Rocbond stucco installations applied in two coats only shall receive the pebble dash finish.

XVI—Special Finishes

Special finishes, such as: stipple, sponge, floated, suction, spatter, antique, pebble-inset, etc., shall be produced only in a third coat composed of Special Finish Rocbond material, and shall be produced only by the highest skilled mechanics. Separate complete instructions for this special work will be furnished to approved organizations.